



- EXPLANATION**
1. White, C.W., 1957. Geologic map of Oregon east of the 117° meridian. U.S. Geological Survey Miscellaneous Publication Map 1-165, scale 1:500,000.
 2. Bond, J.S., compiler, 1958. Geologic map of Idaho. Idaho Bureau of Mines and Geology, Idaho 150-200.
 3. Johnson, C.W., compiler, 1957. Geologic map of California, California Division of Mines and Geology, State Map 2, scale 1:250,000.
 4. Sprunt, J.S., and Collins, J.C., compilers, 1958. Geologic map of Nevada. U.S. Geological Survey, scale 1:500,000.
 5. White, C.W., compiler, 1958. Geologic map of Utah. Utah Geological and Mineral Survey, scale 1:500,000.
 6. West American Geologic Map Committee, 1955. Geologic map of North America. U.S. Geological Survey, scale 1:500,000.

- EXPLANATION**
- BASIN-FILL DEPOSITS**
- Younger basin fill (Holocene to Pliocene)—Consolidated to semiconsolidated, poorly sorted to well sorted, coarse to fine-grained deposits of alluvial fans, pediments, flood plains, terraces, dunes, and Pleistocene lakes. Deposits are erosion products from present-day mountain ranges.
 - Older basin fill (Pliocene and Miocene)—Semiconsolidated conglomerate, sandstone, siltstone, mudstone, freshwater limestone, evaporite beds, water-laid tuff, and interbedded lava flows. Found along basin margins and within mountain blocks; may also underlie younger basin fill deposits in most, if not all, basins.
- CONSOLIDATED ROCKS, WESTERN GREAT BASIN**
- Sedimentary and igneous rocks (Quaternary to Precambrian)—Includes continental volcanic rocks of Cenozoic age; continental sedimentary rocks and igneous intrusions of Cenozoic and Mesozoic age; marine volcanic rocks of Mesozoic and Paleozoic age; and marine sedimentary rocks of Mesozoic, Paleozoic, and Precambrian age.
- CONSOLIDATED ROCKS, EASTERN GREAT BASIN**
- Sedimentary and igneous rocks (Quaternary to Middle Triassic)—Includes continental flood, lacustrine, and eolian sedimentary rocks; marine clastic and carbonate sedimentary rocks; marine and continental volcanic rocks; and igneous intrusions.
 - Carbonate and clastic sedimentary rocks (Early Triassic to Middle Cambrian)—Muddy limestone and dolomite (sometimes silt) or silt) with interbedded shale, sandstone, and conglomerate.
 - Metamorphic, igneous, and sedimentary rocks (Early Cambrian and Precambrian)—Gneiss, schist, and granite (Precambrian crystalline basement) and overlying quartzite, sandstone, and shale.
- Faults**
- Contact—Dashed where approximately located or inferred.
 - High-angle fault—Dashed where approximately located, dotted where inferred. Most represent extensional faults of Miocene and later age.
 - Low-angle fault—Dashed where approximately located, dotted where inferred. Faults on upper plate. Most represent thrust faults of differing ages. Others, especially in part of eastern Nevada and western Utah, represent detachment faults related to Miocene and later extension of Great Basin.
 - Strike-slip fault—Dashed where approximately located, dotted where inferred. Arrows indicate relative direction of movement.
- Petroleum exploration well**—Source of subsurface data; number corresponds to well numbers in table 4.
- Western extent of carbonate-rock province**—Approximately located; based on facies change from continental-shelf carbonate and clastic rocks (western Great Basin) to continental-slope siltstone, shale, and gray limestone (eastern Nevada). Generally follows westernmost extent of carbonate (Quaternary) assemblage rocks as defined by Stenseth and Carbon (1978).
- Study area boundary**

HYDROGEOLOGIC MAP OF THE GREAT BASIN REGION, NEVADA, UTAH, AND ADJACENT STATES

Compiled by
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1996